

FIG.1

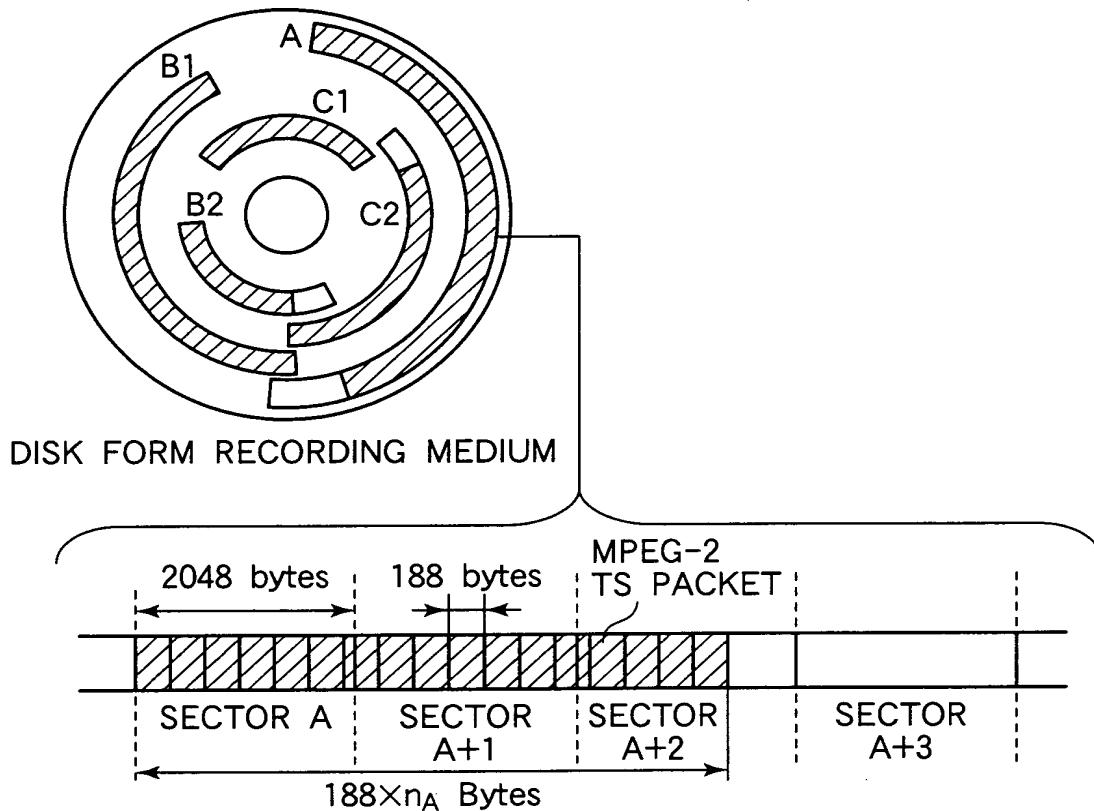


FIG.2

FILE NAME	START SECTOR NUMBER	ACCESS SIZE	FILE MAKING DATE
FILE A	A	$188 \times n_A$	yyymmdd
FILE B	B1	$(188 \times n_B - X)$	yyymmdd
	B2	X	...
FILE C	C1	$(188 \times n_C - Y)$	yyymmdd
	C2	Y	...
...

FIG.3A

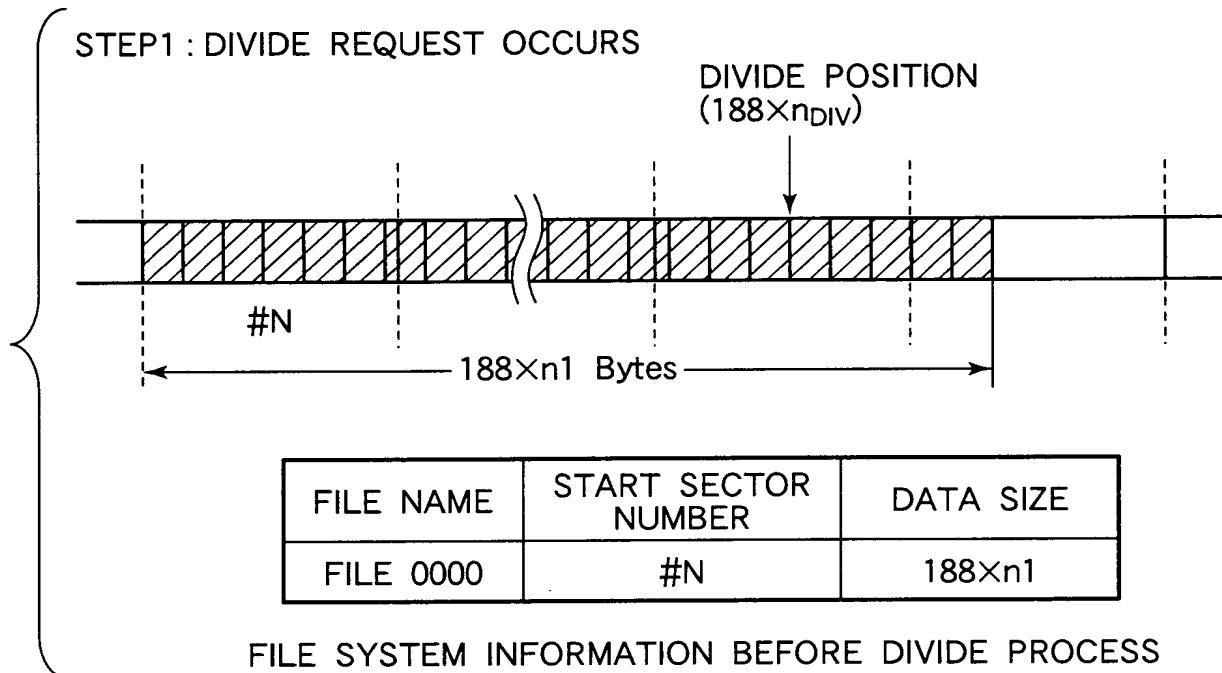


FIG.3B

STEP2 :
MAKE NEW FILE AS FILE 0001 EXTENDING UP TO DIVIDE POSITION

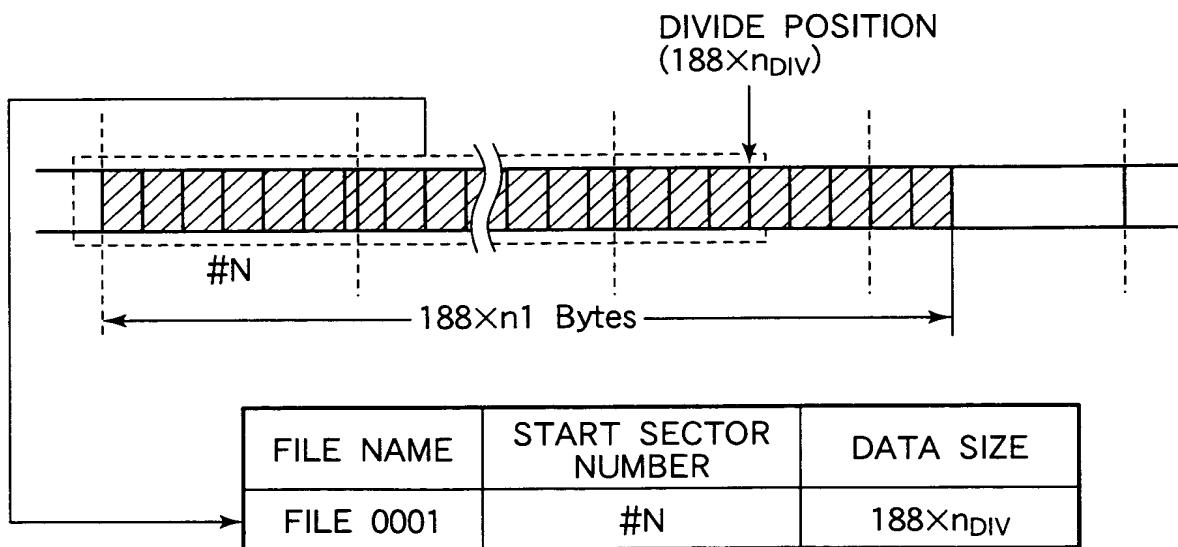


FIG.4A

STEP3 :
 CALCULATE OFFSET L FROM DIVIDE POSITION TO BOUNDARY
 TO THE NEXT SECTOR
 $L=2048-((188\times n_{DIV}) \bmod 2048)$

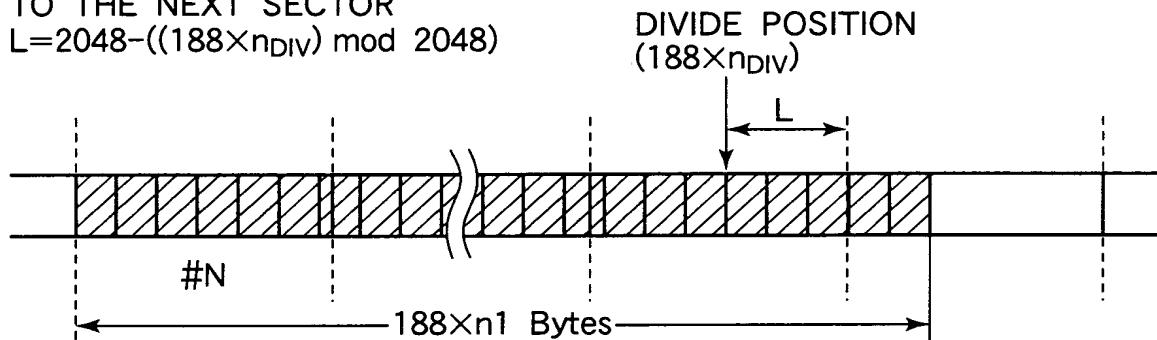


FIG.4B

STEP4 :
 CALCULATE DUMMY TS PACKETS n_{NULL} FOR ADJUSTING ALIGNMENT
 BETWEEN TS PACKET BOUNDARY AND SECTOR BOUNDARY
 WHEREIN n_{NULL} MEETS $(L+188\times n_{NULL}) \bmod 2048=0$

FIG.4C

STEP5 :
 SEARCH NON-WRITTEN SECTOR NUMBER AND START SECTOR
 NUMBER #X, AND WRITE DUMMY TS PACKET

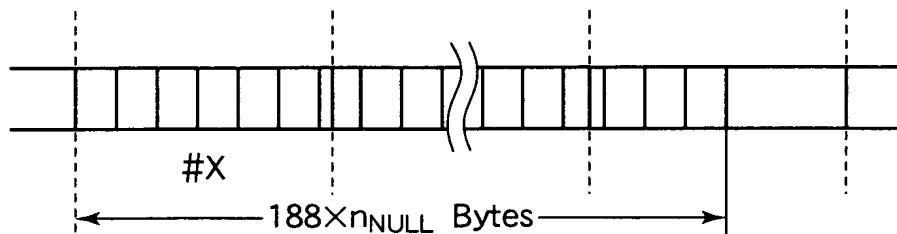


FIG.5A

STEP6 :
CALCULATE SECTOR NUMBER $\#N_{DIV}$ CONTAINING DIVIDE
POSITION $188 \times n_{DIV}$

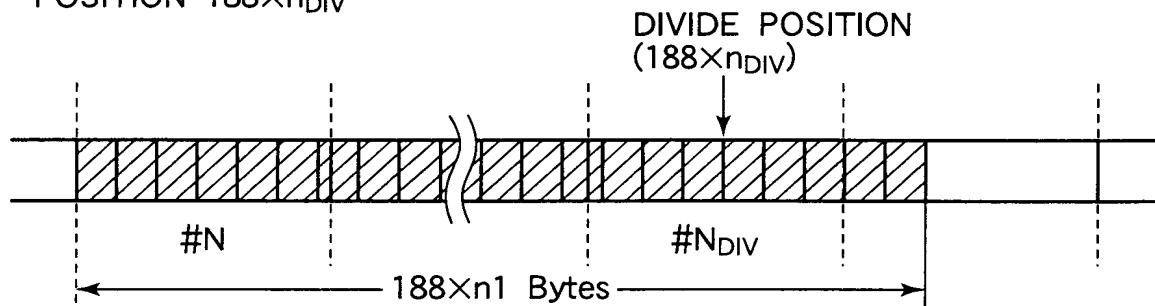


FIG.5B

STEP7 : READ SECTOR DATA OF SECTOR $\#N_{DIV}$

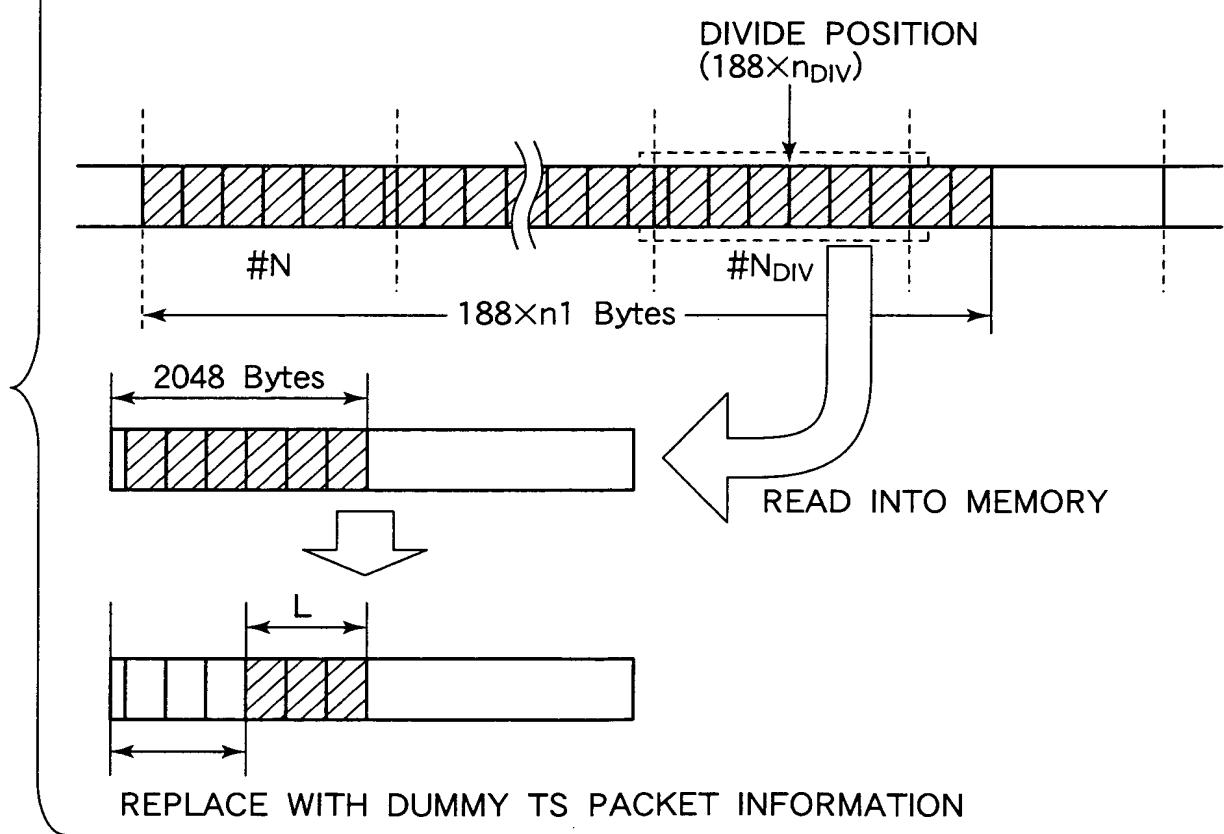
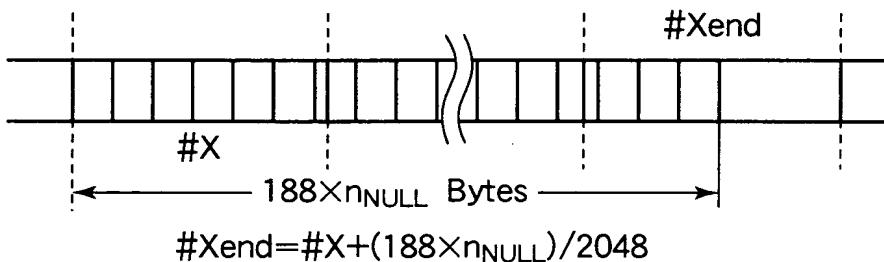


FIG.6A

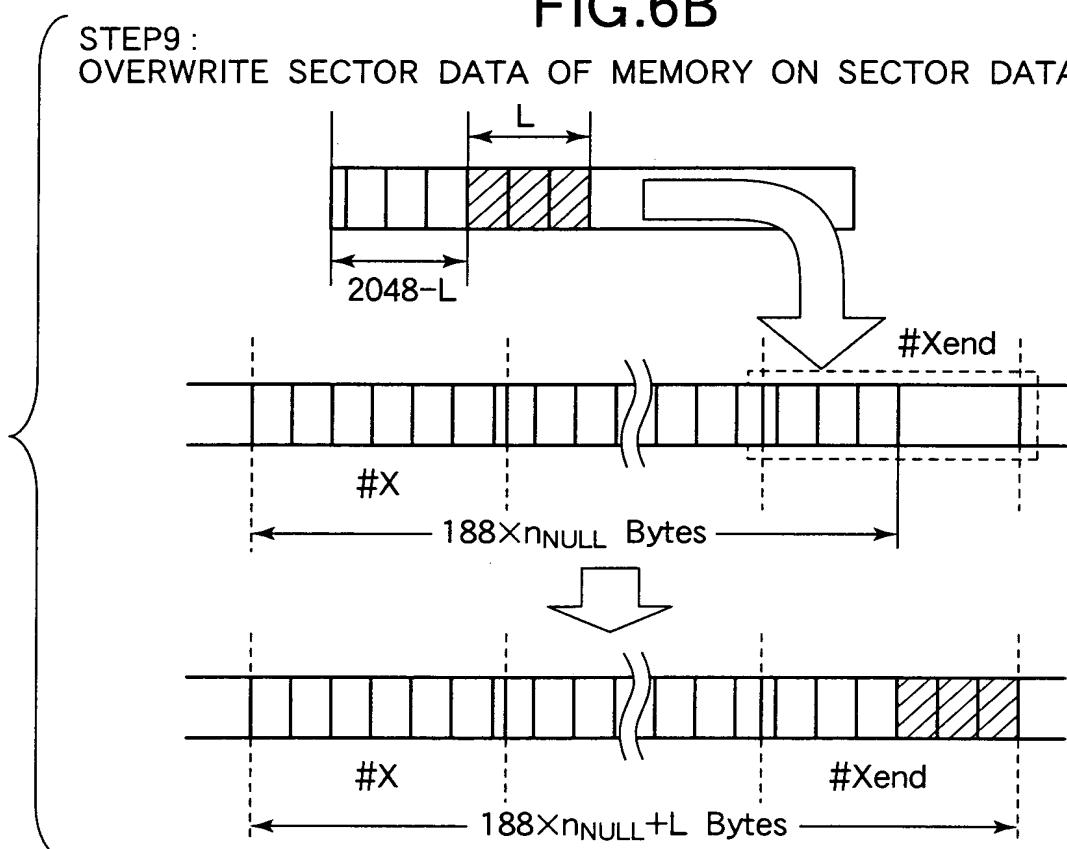
STEP8 :

CALCULATE END SECTOR POSITION #Xend OF DUMMY TS PACKET

**FIG.6B**

STEP9 :

OVERWRITE SECTOR DATA OF MEMORY ON SECTOR DATA #Xend

**FIG.6C**

STEP10 :

NEWLY ENTER DATA AS FILE 0002 FOLLOWING TO DIVIDE POSITION

FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE 0001	#N	$188 \times n_{DIV}$
FILE 0002	#X	$188 \times n_{NULL} + L$
	$#N_{DIV} + 1$	$188 \times n_1 - (188 \times n_{DIV} - L)$

FIG.7

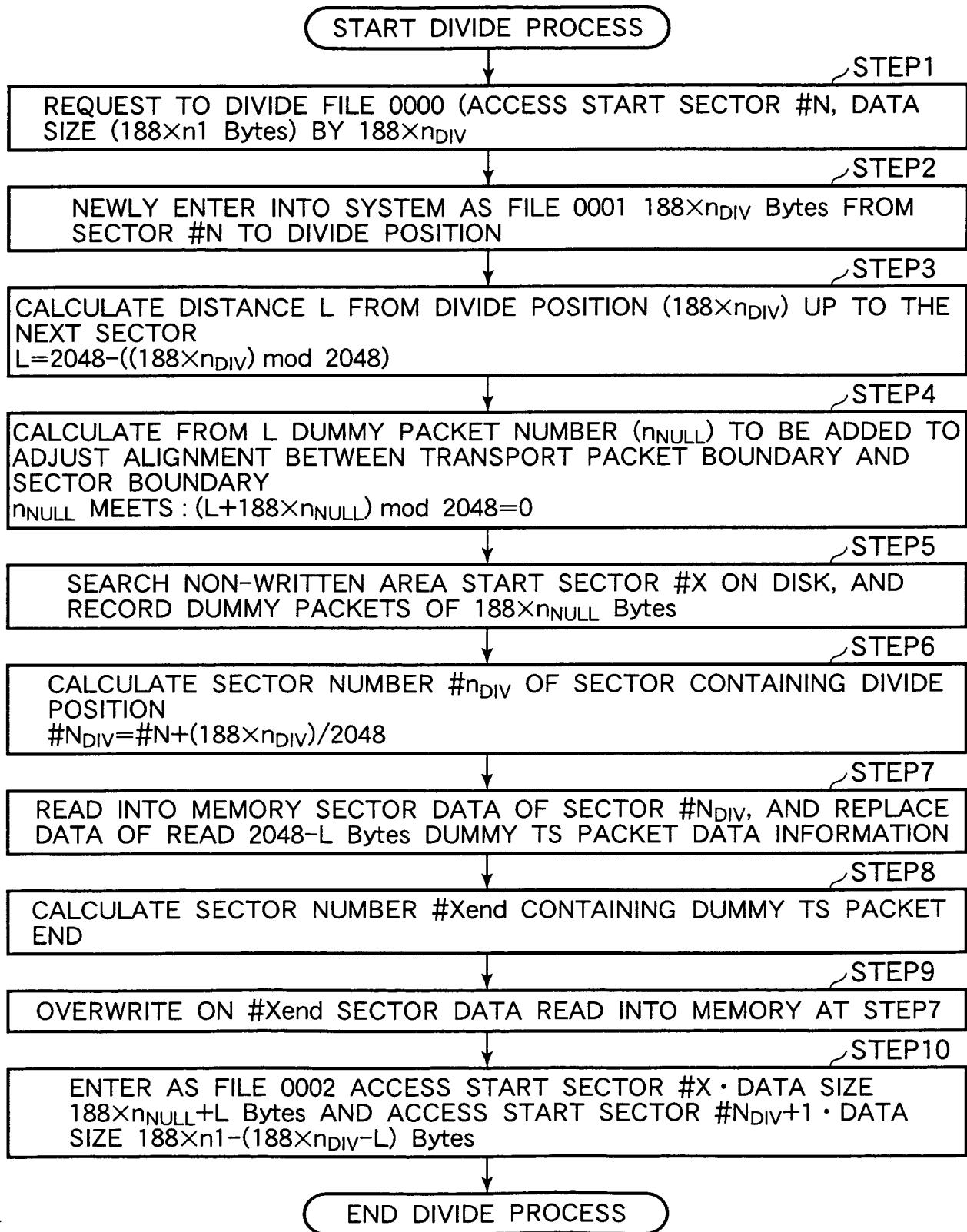


FIG.8

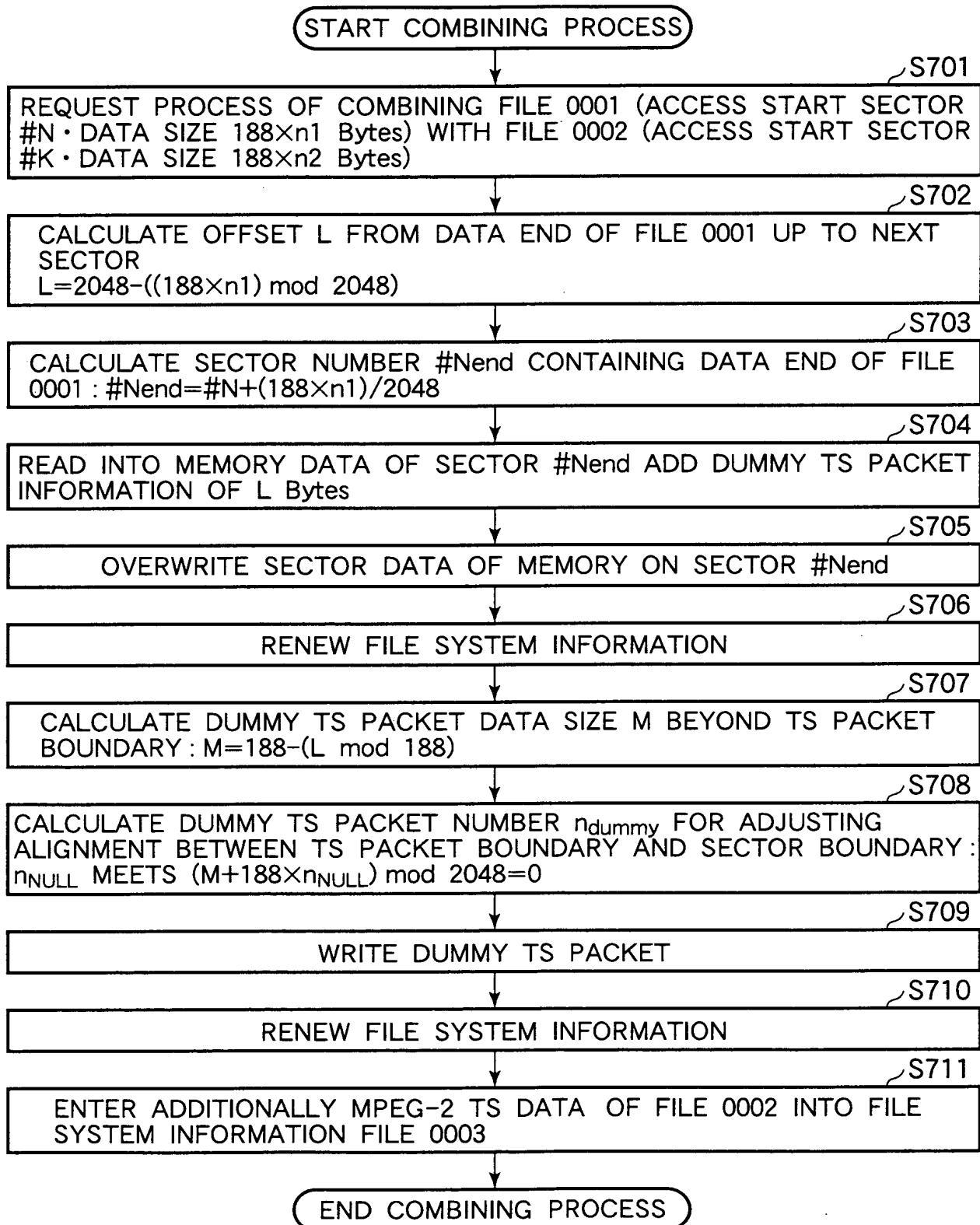


FIG.9

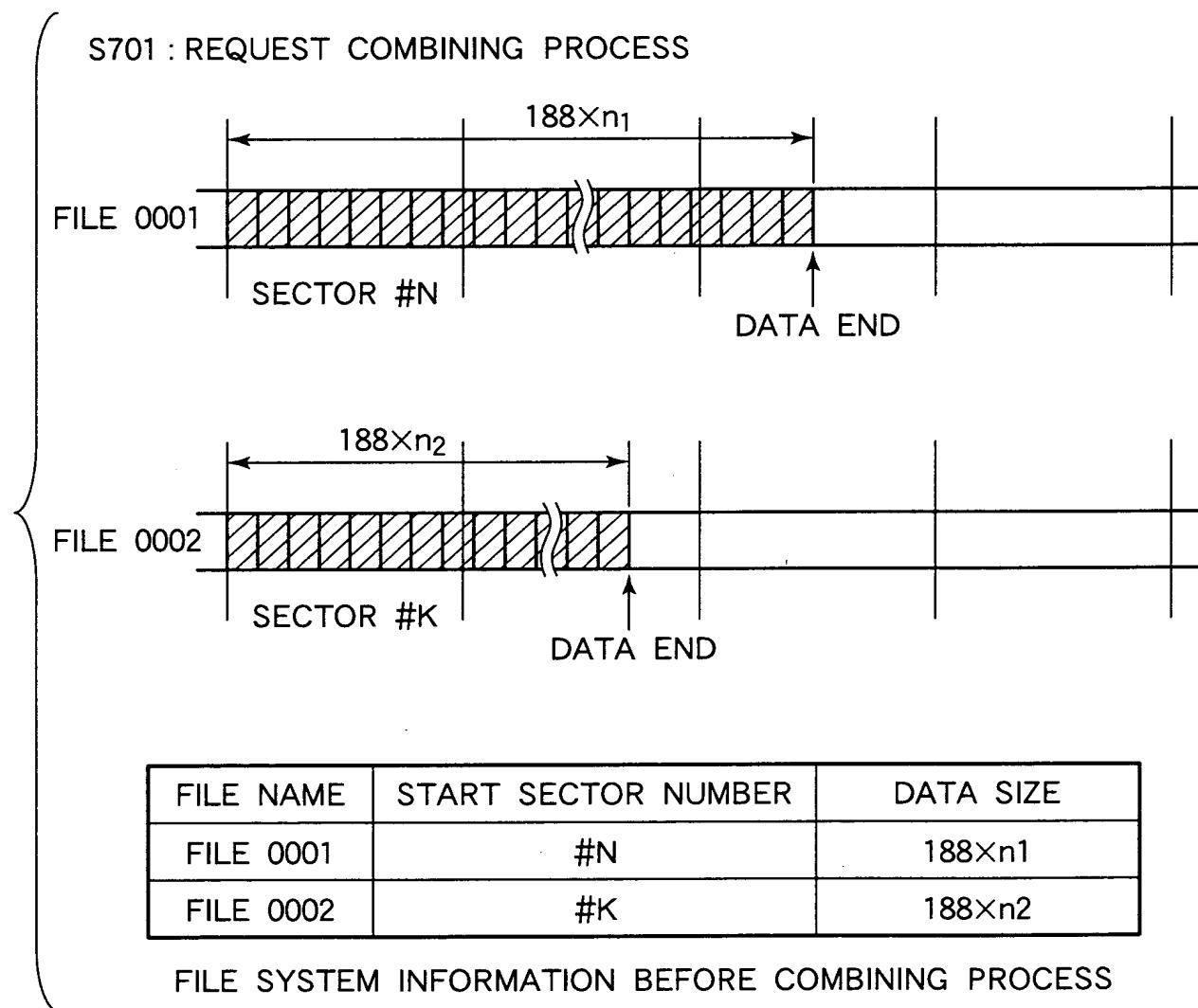
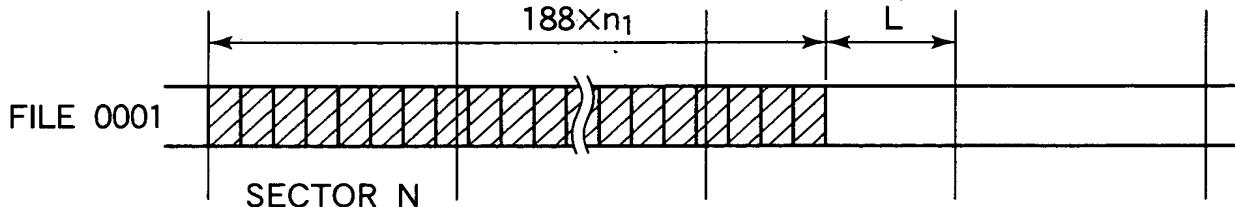


FIG.10A

S702 :

CALCULATE OFFSET L FROM DATA END OF FILE 0001 UP TO THE NEXT SECTOR

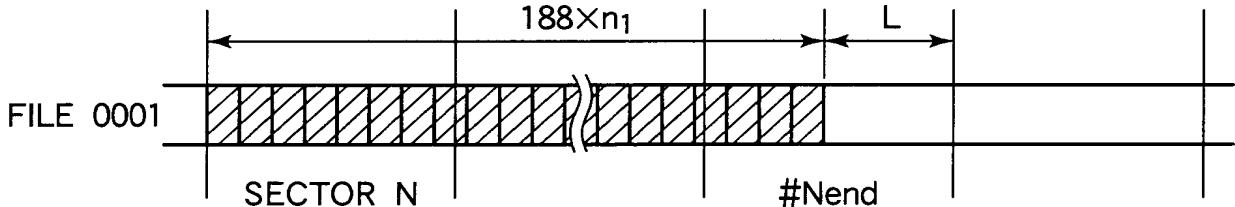
$$L=2048-(188 \times n_2) \bmod 2048$$

**FIG.10B**

S703 :

CALCULATE SECTOR NUMBER #Nend CONTAINING DATA END OF FILE 0001

$$\#N_{end} = \#N + (188 \times n_1) / 2048$$

**FIG.11**

S704 : READ INTO MEMORY DATA OF SECTOR #Nend

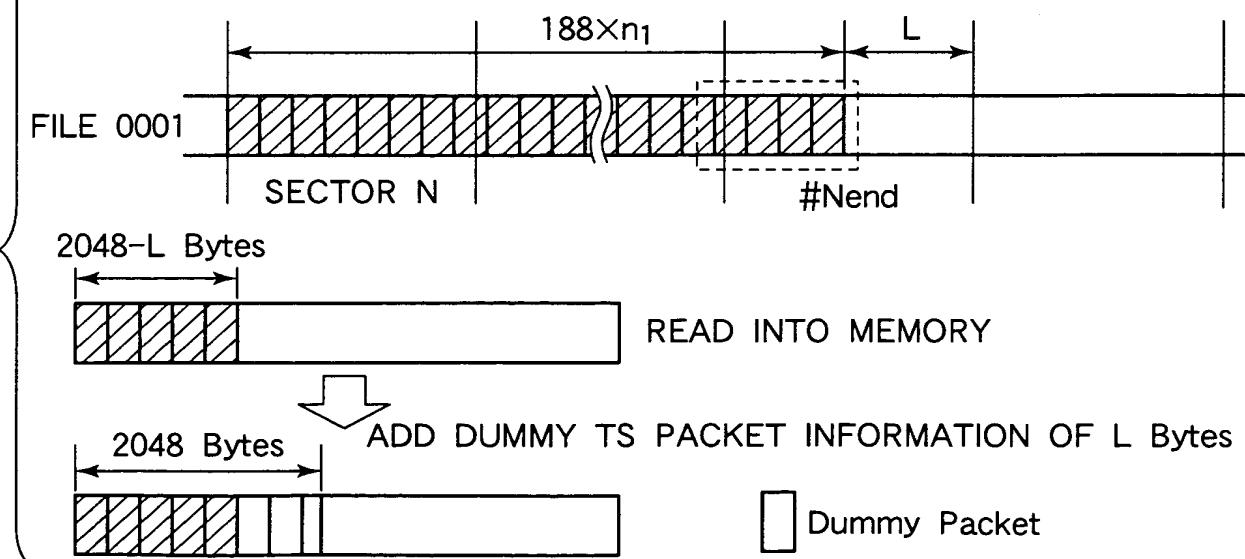


FIG.12A

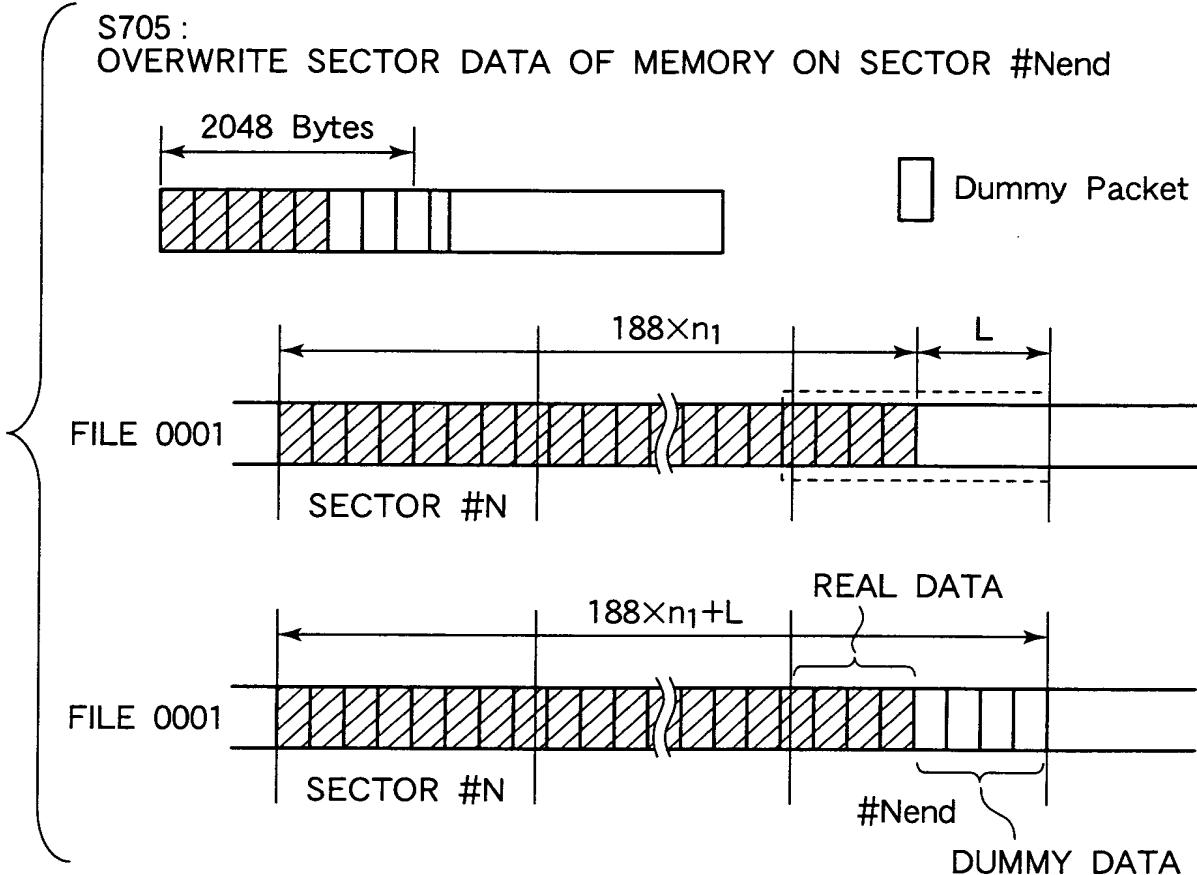


FIG.12B

S706 : RENEW FILE SYSTEM INFORMATION

FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE 0003	#N	188x n_1+L

FIG.12C

S707 :
CALCULATE DUMMY TS PACKET DATA SIZE M BEYOND TS PACKET BOUNDARY

$$M = 188 - (L \bmod 188)$$

FIG.13A

S708 :
 CALCULATE DUMMY PACKET NUMBER n_{NULL} FOR ADJUSTING
 ALIGNMENT BETWEEN TS PACKET BOUNDARY AND SECTOR
 BOUNDARY

$$n_{NULL} \text{ MEETS : } (M + 188 \times n_{NULL}) \bmod 2048 = 0$$

FIG.13B

S709 : READ DUMMY TS PACKET

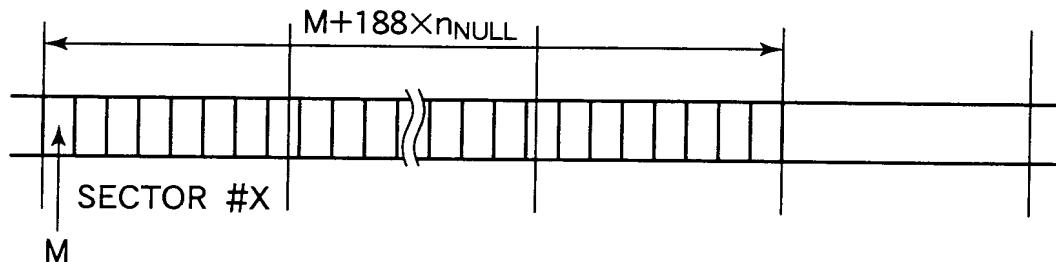


FIG.13C

S710 : RENEW FILE SYSTEM INFORMATION

FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE 0003	#N	$188 \times n_1 + L$
	#X	$188 \times n_{NULL} + M$

FIG.14

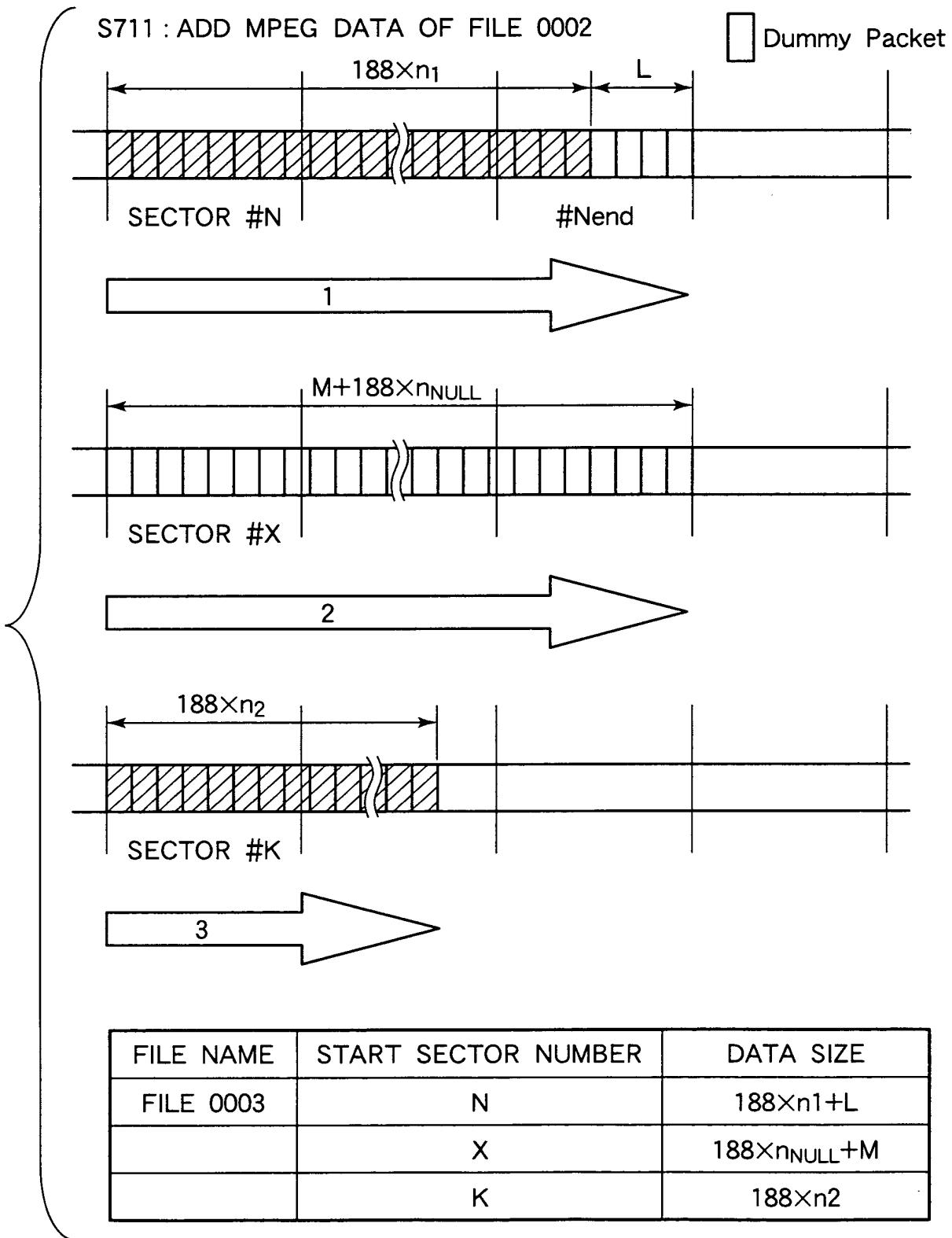


FIG.15A

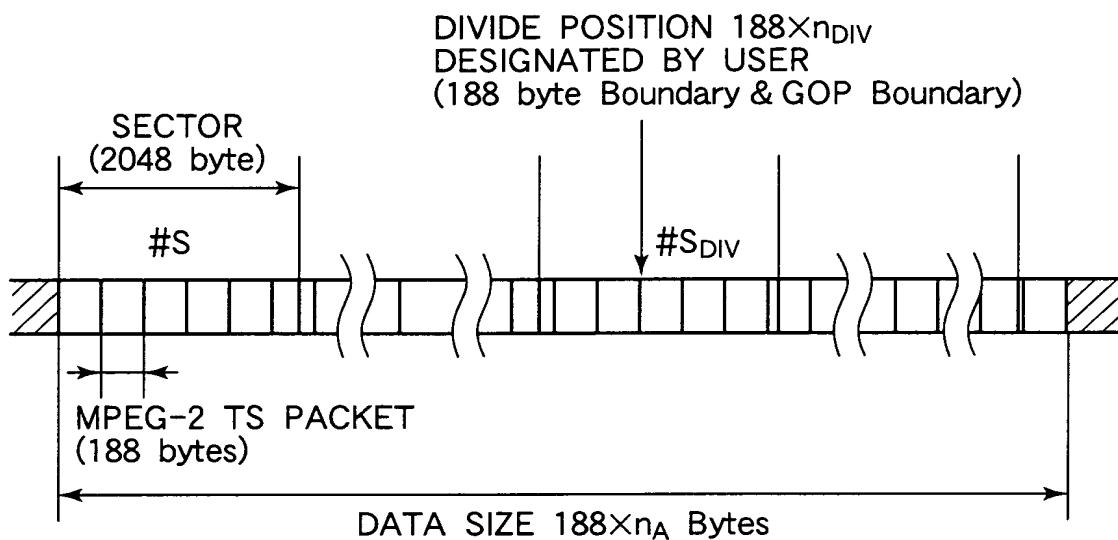


FIG.15B

FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE_A	S	$188 \times n_A$

FIG.16A

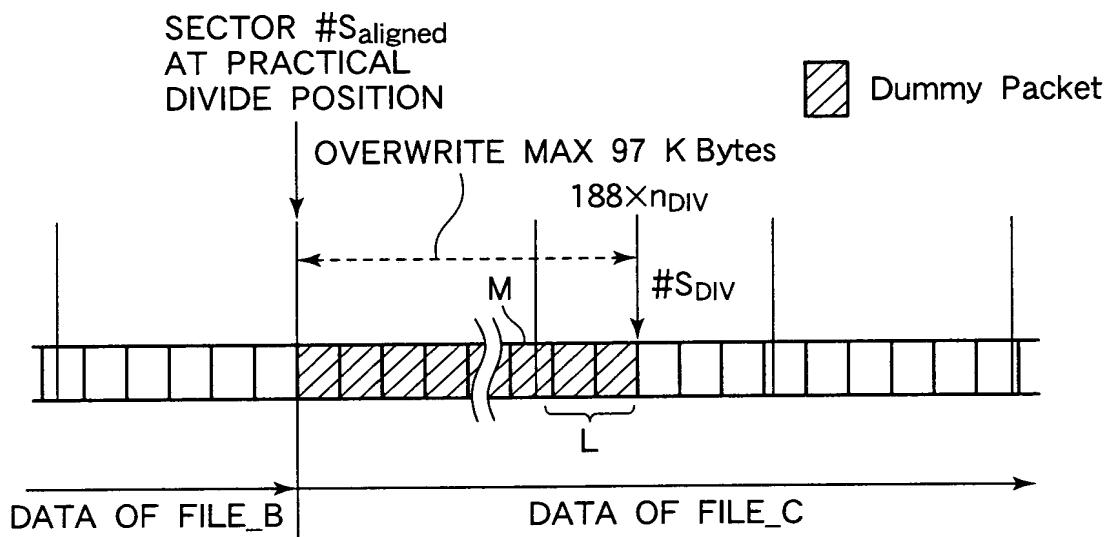


FIG.16B

FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE_B	S	$(S_{aligned}-S) \times 2048$
FILE_C	$S_{aligned}$	$188 \times n_A - (S_{aligned}-S) \times 2048$

FIG.17

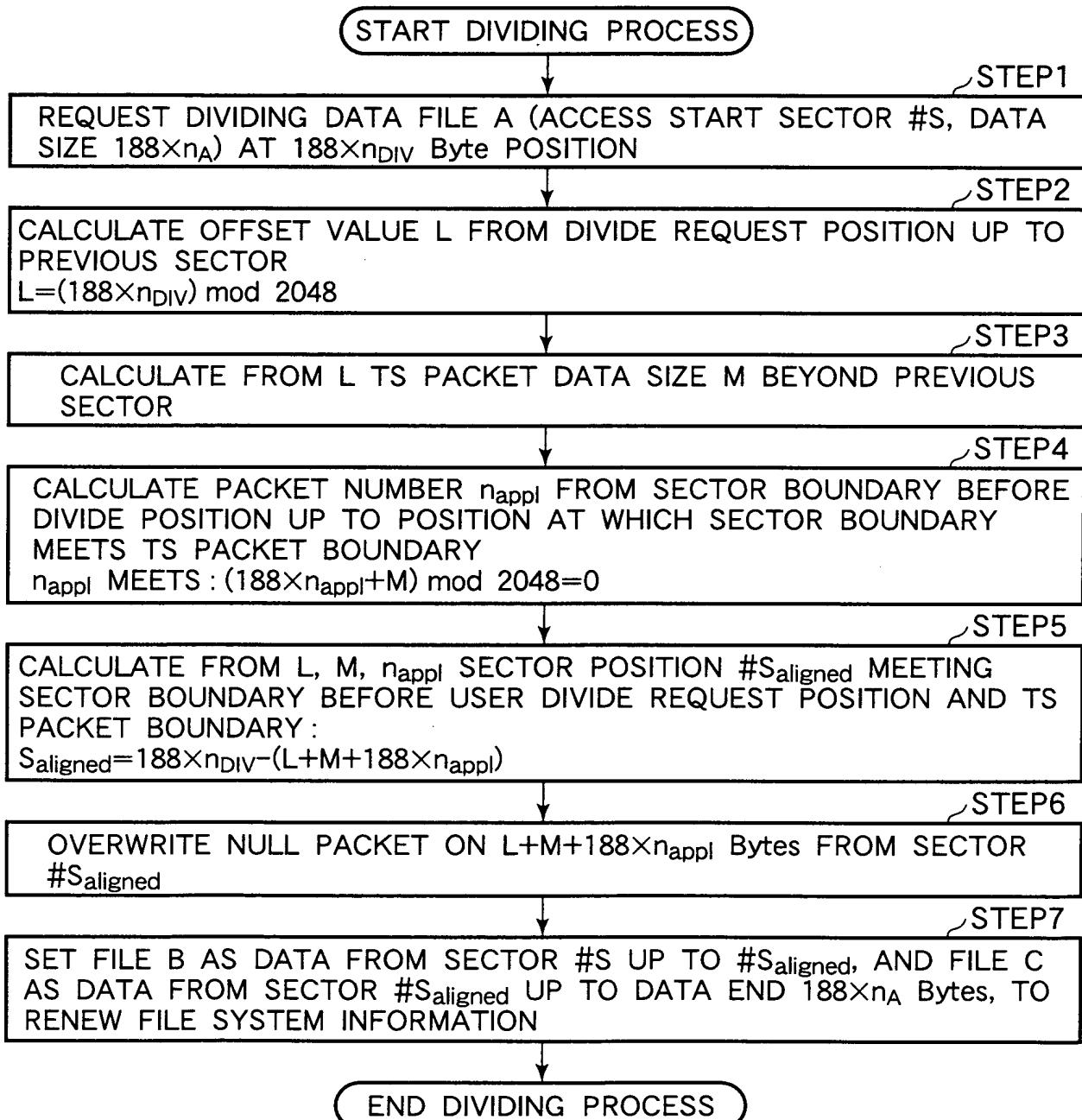


FIG.18

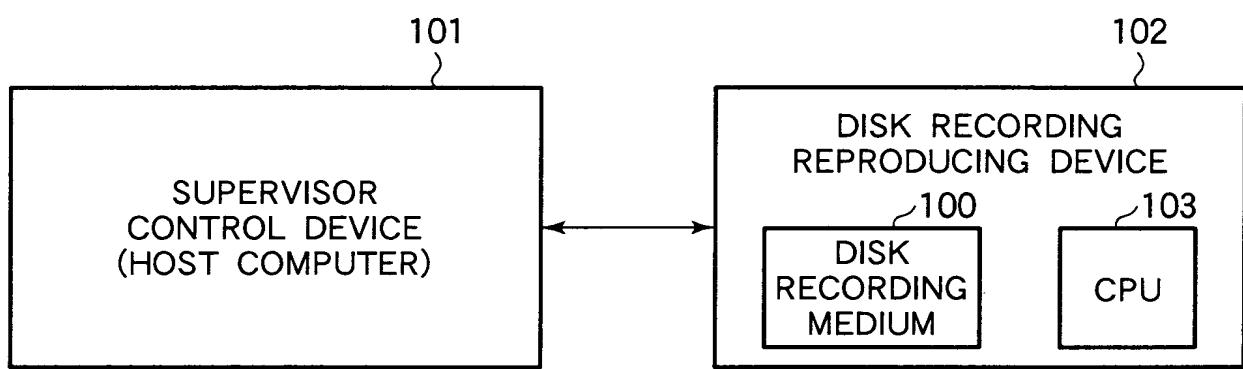


FIG.19

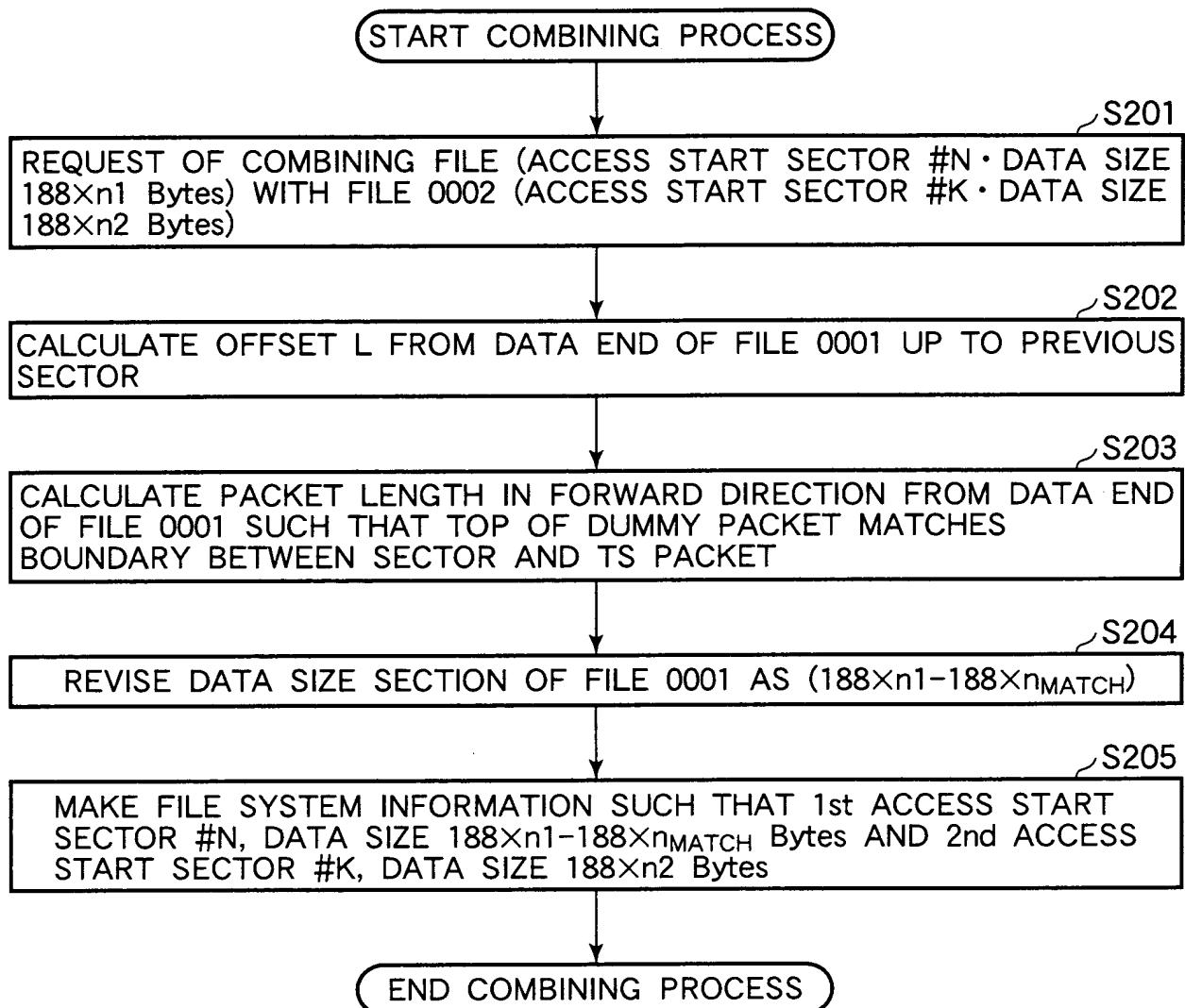


FIG.20

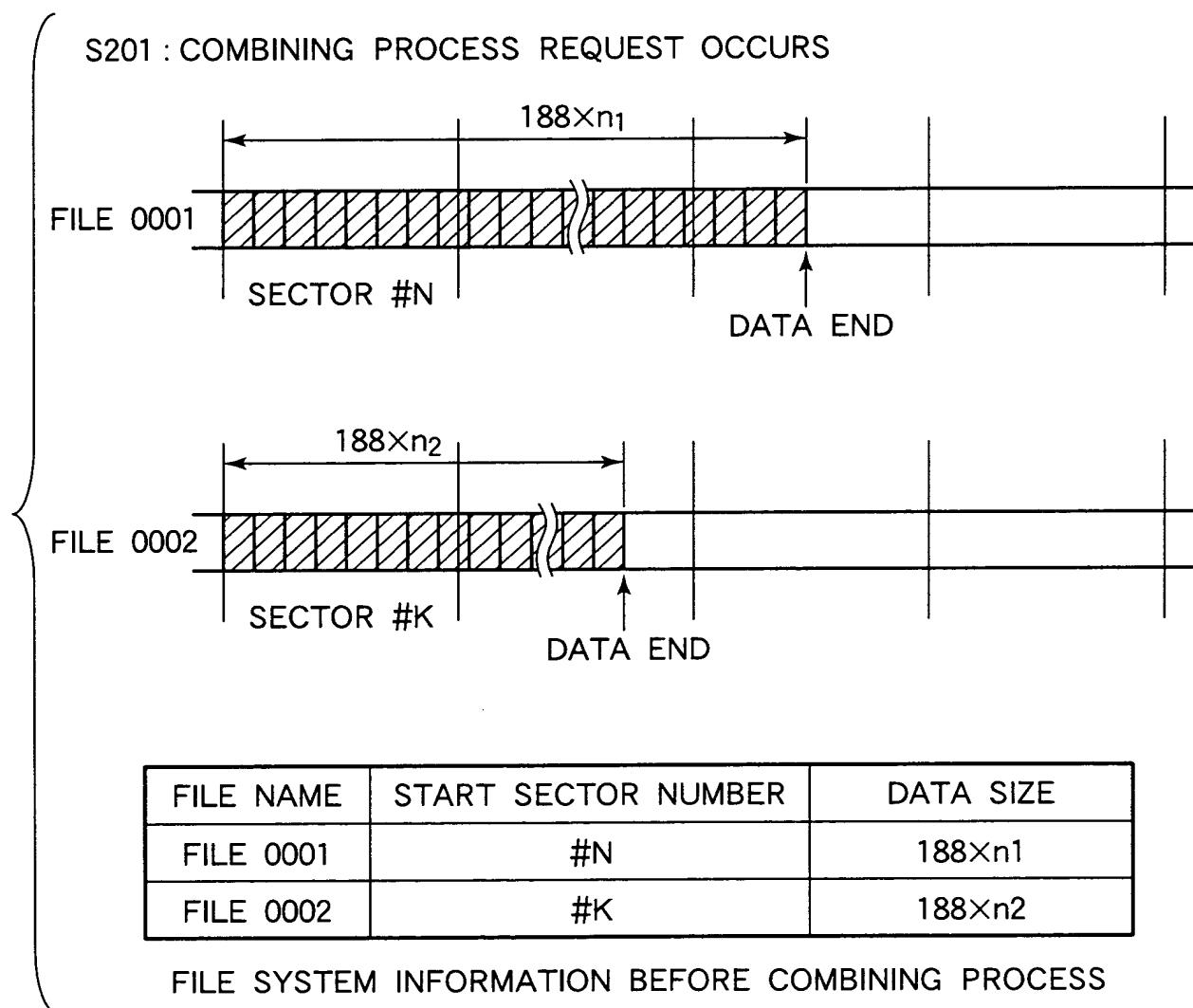


FIG.21A

S202 :

CALCULATE OFFSET L FROM DATA END OF FILE 0001 UP TO PREVIOUS SECTOR

$$L = (188 \times n_1) \bmod 2048$$

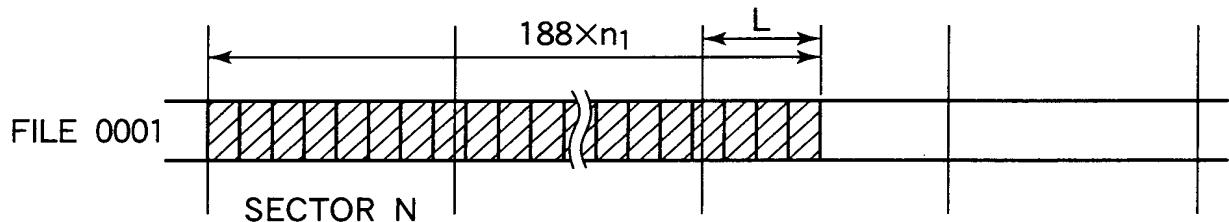


FIG.21B

S203 :

CALCULATE LENGTH IN FORWARD DIRECTION FROM DATA END OF FILE 0001 TO COMMON BOUNDARY SUCH THAT PACKET BOUNDARY MATCHES SECTOR BOUNDARY :

$$n_{\text{MATCH}} \text{ MEETS } ((188 \times n_{\text{MATCH}}) - L) \bmod 2048 = 0$$

FIG.22A

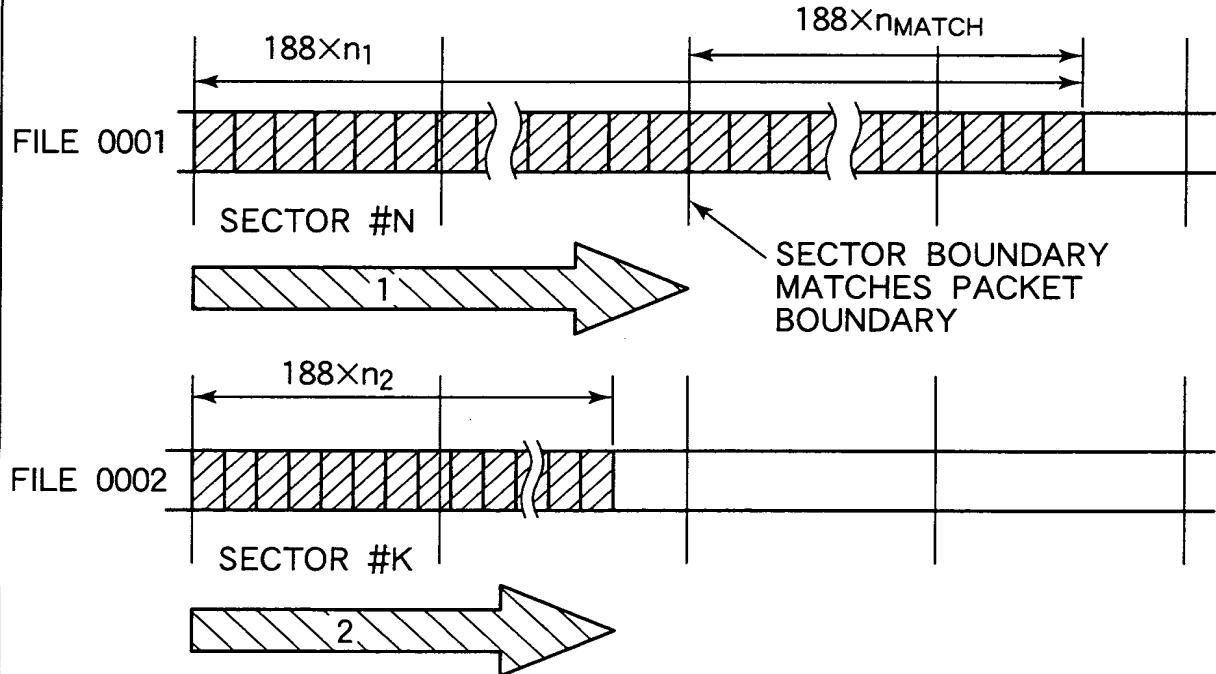
S204 :

REVISE DATA SIZE SECTION OF FILE 0001 IN FILE SYSTEM INFORMATION

FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE 0001	#N	$188 \times n_1 - 188 \times n_{\text{MATCH}}$
FILE 0002	#K	$188 \times n_2$

FIG.22B

S205 : RENEW FILE SYSTEM INFORMATION FOR COMBINING



FILE NAME	START SECTOR NUMBER	DATA SIZE
FILE 0003	1st ACCESS START SECTOR NUMBER #N	$188 \times n_1 - 188 \times n_{\text{MATCH}}$
	2nd ACCESS START SECTOR NUMBER #K	$188 \times n_2$

DATA LENGTH OF FILE 0001 BEFORE COMBINING CAN BE DIVIDED BY 2048 Bytes :

$$(188 \times n_1 - 188 \times n_{\text{MATCH}}) \bmod 2048 = 0$$